

Amendments to the Specification

Please replace the paragraph beginning on page 5, line 6 with the following paragraph:

It is an advantage of the inventive method and filter arrangement that the number of complex multiplications, that need to be performed for providing the filter output at a certain time t_n , is only ~~proportional to N^2~~ proportional to N . Therefore, the inventive method and filter arrangement reduces the calculational effort to the order of $O(N)$. This is because of the recursive architecture, the current filter output signal corresponding to the time t_n depends on the filter output signal of the preceding clock cycle corresponding to t_{n-1} .